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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROUVEN DAY

Appeal 2016–002612
Application 12/558,441
Technology Center 3600

Before HUBERT C. LORIN, ANTON W. FETTING, and
MATTHEW S. MEYERS, *Administrative Patent Judges*.
FETTING, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE¹

Rouven Day (Appellant) seeks review under 35 U.S.C. § 134(a) of a final rejection of claims 1–20, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

¹ Our decision will make reference to the Appellant’s Appeal Brief (“App. Br.,” filed July 29, 2015) and Reply Brief (“Reply Br.,” filed December 30, 2015), and the Examiner’s Answer (“Ans.,” mailed October 30, 2015), and Final Action (“Final Act.,” mailed February 10, 2015).

The Appellant invented “a system and method for modeling service endpoints in BPMN tools using BPMN constructs.” Spec. para. 5.

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below (bracketed matter and some paragraphing added).

1. A computer-implemented method for modeling service endpoints of a process based on business process model and notation (BPMN), the method being performed by execution of computer readable program code by at least one processor of at least one computer system, the method comprising:

[1] modeling the process using at least one of the processors running a BPMN modeling tool using BPMN graphic notation and flowcharting techniques of BPMN;

[2] modeling a service endpoint using the BPMN modeling tool,

wherein a user enters a name and selects a service operation for a model entity for the modeled service endpoint,

the modeling of the service endpoint includes creating a message event definition reflective of the model entity,

wherein an instance of the message event definition is created using a modeling infrastructure based on a BPMN metamodel and is stored as a transient model entity in at least one memory of the at least one computer system,

wherein storage of the model entity includes storing the modeled service endpoint as a trigger of a message start event of the modeled process;

[3] attaching the message event definition to the message start event of the modeled process;

and

[4] binding an operation instance of the modeled process to a process instance of the modeled process using the message event definition;

[5] generating, based on the entered name, using at least one of the processors, a uniform resource locator (URL) identifying the service endpoint, the URL being a web-based address under which the service operation as represented by the process can be called by a business process application;

and

linking, using at least one of the processors, the service endpoint to the process.

The Examiner relies upon the following prior art:

Hapner	US 5,692,183	Nov. 25, 1997
Gish	US 6,266,709 B1	July 24, 2001
Koehler	US 2005/0209993 A1	Sept. 22, 2005
Ivanov	US 2006/0293941 A1	Dec. 28, 2006
Larvet	US 2007/0006134 A1	Jan. 4, 2007
Bodin	US 7,305,482 B2	Dec. 4, 2007

Claims 1–20 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–3, 6–10, 13–16, 19, and 20 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ivanov, Gish, Koehler, Hapner, and Larvet.

Claims 4, 5, 11, 12, 17, and 18 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Ivanov, Gish, Koehler, Hapner, Larvet, and Bodin.

ISSUES

The issues of eligible subject matter turn primarily on whether the claims recite more than an abstract idea.

The issues of obviousness turn primarily on whether the art applied shows that the recited operations could be performed by a BPMN tool.

FACTS PERTINENT TO THE ISSUES

The following enumerated Findings of Fact (FF) are believed to be supported by a preponderance of the evidence.

Facts Related to Claim Construction

01. “The Business Process Model and Notation (BPMN) is an industry standard graphic notation for representing business process workflows.” Spec. para. 2.

Facts Related to the Prior Art

Ivanov

02. Ivanov is directed to “modeling business processes.” Ivanov para. 3.
03. Ivanov describes “graphically modeling business processes using symbols that represent, for example, Business Process Execution Language (BPEL) concepts.” Ivanov para. 3.
04. Ivanov describes “business processes [being] modeled with symbols. Each symbol may have a color corresponding to a semantic grouping and may comprise an icon pictorially representing a BPEL concept. Further, each symbol may be linked to XML code. The XML code may implement the BPEL concept represented by each symbol.” Ivanov para. 13.

Gish

05. Gish is directed to “operating system software for managing
Enterprise computing in a network user interface.” Gish 1:24–27.

06. An application has a specific set of message events, and each component (front **410** and back **400** ends) includes local handlers for the set of message events. Thus, any two components can be plugged into the execution framework **430** to form an application **440** if they include local handlers for messages in the set of message events defined for the application **440**. The components each include a local instance of a communication library **420**. A component only interacts with the Application Programming Interface (API) of its local communication library **420** in order to send or receive message events.

Gish 17:56–64.

Koehler

07. Koehler is directed to generating “an executable workflow code from an unstructured cyclic process model, . . . executing a workflow code of an arbitrary process model, [and] a workflow execution engine for process models with or without control cycles.” Koehler para. 1.

08. “As language for the workflow code for example BPEL4WS (Business Process Execution Language for Web Services, can be used.” Koehler para. 1.

09. Koehler Figure 1 shows an example of a graphical representation of a business process model, wherein the business process model describes the possible flow of activities. This graphical representation uses well-defined elements from a graphical modeling language that was designed for business process modeling needs. Several different graphical modeling languages exist today to describe the process model. Well-known examples for these modeling languages are ARIS, WBI

Modeler (IBM), and *BPMN (Business Process Modeling Notation)*. The invention can be used for any of these modeling languages and others not mentioned here, but known to the expert. Which one is used depends on the technical boundary conditions. Strictly speaking, **FIG. 1** shows an example of an electronic purchasing business process adopting a BPMN-like notation.

Koehler para. 75–76.

Hapner

10. Hapner is directed to “providing transparent persistence within a distributed object operating environment.” Hapner 1:10–13.

Larvet

11. Larvet is directed to “a method of providing a new web service, a computer program product adapted to implement that method, in particular a use case assistant, and a computer file obtained by that method.” Larvet para. 2.

ANALYSIS

Claims 1–20 rejected under 35 U.S.C. § 101 as directed to non–statutory subject matter

Claims 1, 8, and 14 are the independent claims on appeal, with the rest of the claims on appeal depending therefrom.

The Examiner rejects these claims according to the two step procedure in *Alice Corp., Pty. Ltd. v CLS Bank Intl*, 134 S.Ct. 2347 (2014). As to the first step, the Examiner finds that the claims are directed to modeling a business process using standard notation, which is similar to organizing information through mathematical correlations. Final Act. 3.

Appellant argues that

the Examiner appeared to improperly generalize the subject matter disclosed in the present application and recited in the pending claims by indicating that "the act of modeling itself is an abstract idea and the addition of computers to carry out that abstract idea does not serve to be significantly more than the abstract idea itself This is so because it does not change the field of web services nor does it change the specific computers carrying out the web services but rather merely models how the individual processes would be carried out at some future point."

Reply Br. 4.

We agree with the Appellant that the determination under step 1 that the claims are directed to an abstract idea is oversimplified. The claims are required to be considered as a whole.

"In determining the eligibility of respondents' claimed process for patent protection under § 101, their claims must be considered as a whole."

Diamond v. Diehr, 450 U.S. 175, 188 (1981). "The 'abstract idea' step of the inquiry calls upon us to look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter.'" *Affinity Labs of Texas v. DirectTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (quoting *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016); see also *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016), quoted in *Apple, Inc. v. Ameranth, Inc.*, 7842 F.3d 1229, 1241 (Fed. Cir. 2016).

Examiner in particular fails to explain why limitations [2]–[4], which Appellant points to (Appeal Brief 11), do not alter the scope of what the claims as a whole are directed to. Because the claims have not been considered as a whole, the explanation for determining that the claims are

directed to an abstract idea is inadequate. *See* May 2016 Memorandum 2 (“the rejection . . . must provide an explanation . . . which [is] sufficiently clear and specific to provide applicant sufficient notice of the reasons for ineligibility.”)

Given the inadequacy of the determination under the first part of the Alice framework, we need not address the second part of the framework. We reverse the rejection of claims 1–20.

Claims 1–3, 6–10, 13–16, 19, and 20 rejected under 35 U.S.C. § 103(a) as unpatentable over Ivanov, Gish, Koehler, Hapner, and Larvet

We are persuaded by Appellant’s argument that

None of the references teach or suggest use of the recited **“BPMN modeling tool”**, **“BPMN metamodels”** based on which an **instance of the message event definition is created and stored**, in accordance with the conditions recited in claim 1 (i.e., “storing”, “attaching” and “binding”), as a transient model entity in memory. (emphasis supplied). While some of the references may refer to use of a web service definition language (“WSDL”), it is irrelevant to the use of BPMN modeling tool and BPMN metamodels for the purposes of modeling service endpoints of a business process in accordance with the recitation of claim 1.

Reply Br. 8. *See also* Appeal Brief 20–29.

The Examiner finds that the references would describe the independent claims were those claims to recite using BPEL instead of BPMN and that both BPEL and BPMN are widely known business modeling tools.

Appellant does not dispute this.

The Examiner does not find that BPMN and BPEL have overlapping techniques for performing the specific modeling actions recited in the claims. Absent such a finding with supporting evidence, one of ordinary skill would not know whether, despite being an alternative modeling platform, BPMN could perform those particular modeling actions as described in the art.² Essentially, the Examiner fails to support the findings with an enabling description in the art.

Claims 4, 5, 11, 12, 17, and 18 rejected under 35 U.S.C. § 103(a) as unpatentable over Ivanov, Gish, Koehler, Hapner, Larvet, and Bodin

These are dependent claims.

CONCLUSIONS OF LAW

The rejection of claims 1–20 under 35 U.S.C. § 101 as directed to non–statutory subject matter is improper.

² We note that two references in the record suggest there are differences between the specific capabilities of BPMN and BPEL.

Mark Nelson, “Choosing BPMN or BPEL to model your processes”, February 13, 2012,

<http://redstack.wordpress.com/2012/02/13/choosing-bpmn-or-bpel-to-model-your-processes>.

Chun Ouyang et al., “Translating BPMN to BPEL”, available 2006, bpmcenter.org/wp-content/uploads/reports/2006/BPM-06-02.pdf.

The rejection of claims 1–3, 6–10, 13–16, 19, and 20 under 35 U.S.C. § 103(a) as unpatentable over Ivanov, Gish, Koehler, Hapner, and Larvet is improper.

The rejection of claims 4, 5, 11, 12, 17, and 18 under 35 U.S.C. § 103(a) as unpatentable over Ivanov, Gish, Koehler, Hapner, Larvet, and Bodin is improper.

DECISION

The rejections of claims 1–20 are reversed.

REVERSED